



ENERGY SAVING INJECTION MOLDING MACHINES

**RANGE: 40 TON TO 1600 TON**



**BOMBAY HYDRAULIC (INDIA)**

## Company Profile

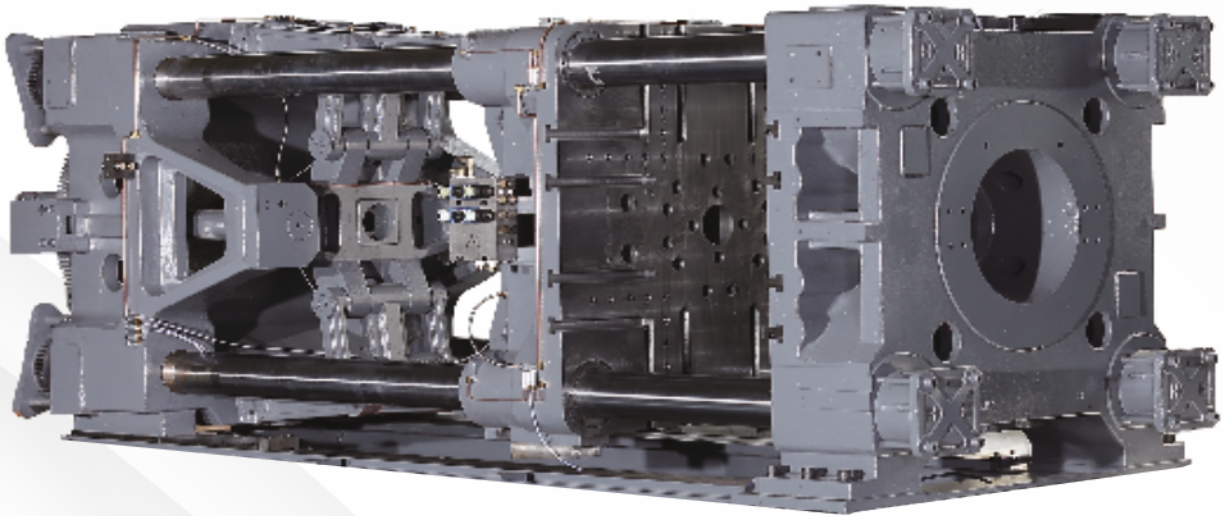
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**BOMBAY HYDRAULIC (INDIA)** was established in 1985. After years of development, the company is now one of the leading company that have both R&D manufacturing of Injection Moulding machines under the brand name of BHI & Novatec. Stringent quality control & rigid quality standard is the benchmark of our company. Our technically advanced machines have wide range of diversity, Toggle type Plastic Injection Moulding machines, Energy servo Systme, VDP Model (Variable Displacement Pump) E-Series timer based fully automatic machines, Semi-automatic with auto injection & DD Hydro motor of clamping force ranging from 40 ton to 1300 ton.

Our Company BHI adopting the most modern technology is energy saving, easy to maintain with it's relatively simple structure & yet very productive in highly precise Products. The diverse application ranges from electrical, electronics, home appliances, cosmetic, automobile, house hold, pharmaceutical, engineering Components & Pet Meterial

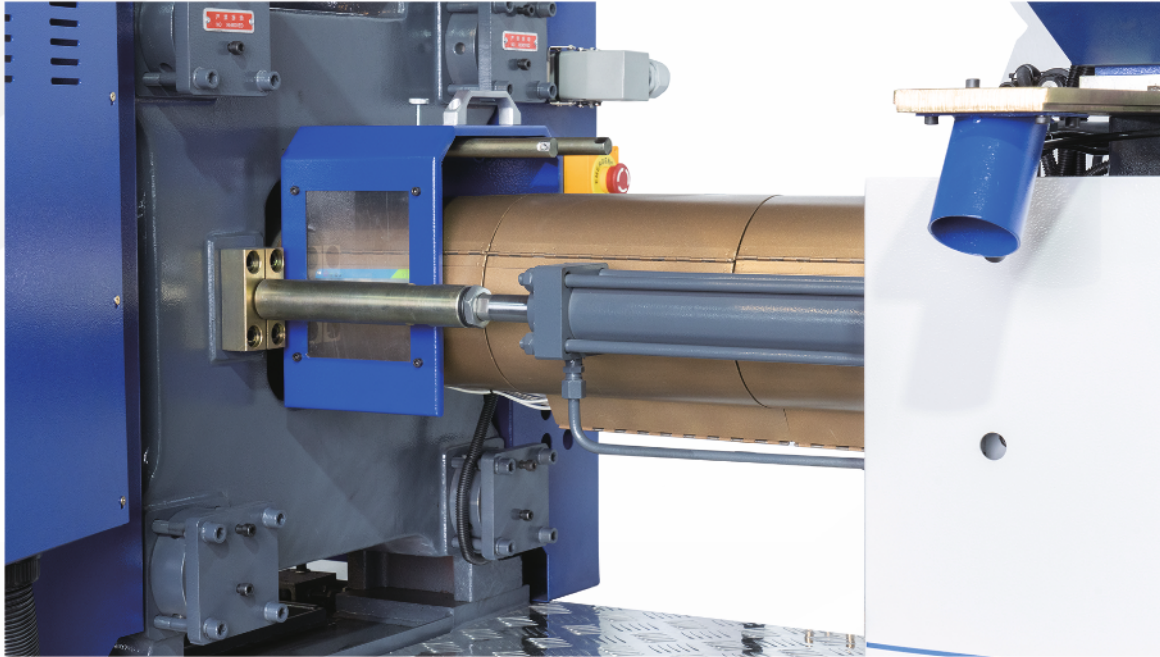
## Clamping Unit

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- Optimize and strengthen the strength of the mold and frame, so that the rigidity is 30% higher than the ordinary machine, to meet the reliability requirements of rapid production.
- Uniform stress pressing technology, locking force evenly distributed, small deformation of the template, effectively protect the template and mold.
- The rigidity of the whole series of templates is high, the rigidity of the closing mechanism is increased by 30%, and the T-groove is standard, which is convenient for clamping the mold and prolonging the service life of the template.
- Hydraulic drive automatic mold adjustment, adjustment is more convenient.
- Equipped with fast closing and opening cache function, improve the speed and accuracy of opening and closing.





Adopting a short and powerful dual cylinder injection system and high-precision linear guide rail, combined with a low inertia and high response injection mechanism, ensuring smooth injection action and no deformation of the fixed template, optimizing the design of screw components to achieve better plasticizing ability and effect. Automatic material cleaning, anti salivation, anti cold start delay and other functions ensure the efficiency, simplicity, and safety of work.



- Optimum design of injection structure improves mechanical rigidity during injection, reduces axial deformation of injection table and improves injection stability and accuracy.
- Humanized closed design ensures safe operation.
- Equipped with high-efficiency mixing screw, enhanced plasticizing efficiency, quality and production efficiency.
- The ejection part uses linear guide design and proportional back pressure calibration to improve the ejection accuracy.

# Product Details Introduction

## CORE/SCREW CONTROL

Flexible core programming control, an independent hydraulic pump stations to provide power.

## SUPER PRECISION SUPER LONG WORKING LIFE

Optimization of high-speed toggle clamp unit and stress of low pressure for joint ensure super precision and super long life of machine.

**NOVATEC**

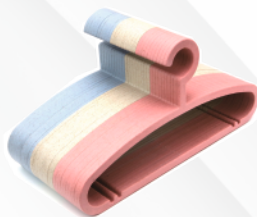
**ENERGY SAVING & SAFETY**

## OIL SYSTEM

High-performance lubricating oil, decline the wear sharply, keep longterm positioning accuracy of the mold.

## WORKING ENVIRONMENT

Mobile waste oil clean tray, so that the waste oil clean platen area is very simple.





## EXTRA LARGE PLATEN DESIGN GREATER SPACE FOR INSTALLING PLATEN

Large-capacity wide platen designed to meet the customer selection scope.

## HIGH-PRECISION TEMPERATURE CONTROL

Self-adaptive barrel temperature accuracy and stability control.



## EASILY TRANSFER

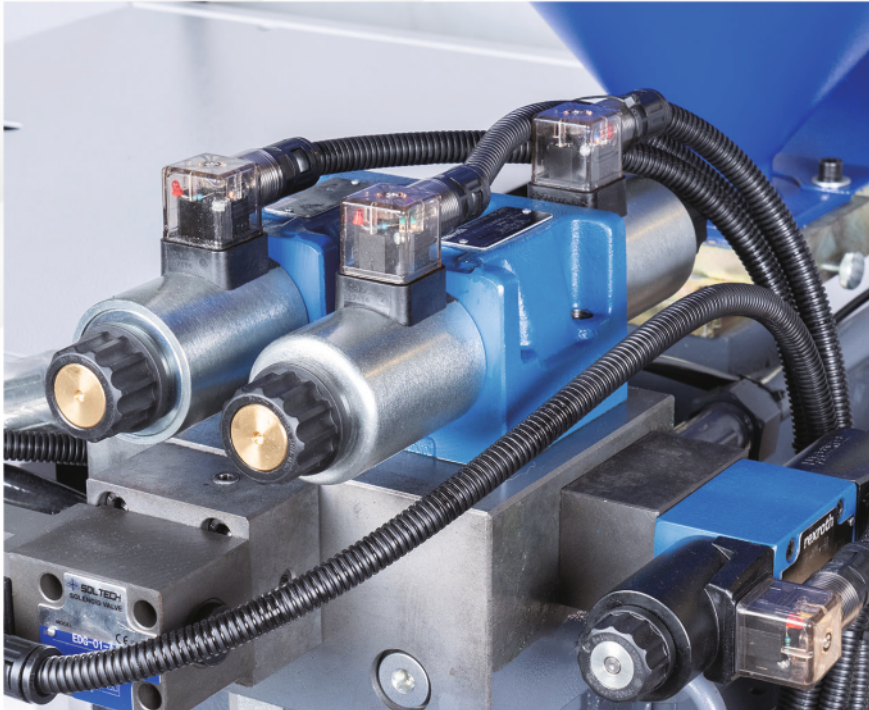
Multi-directional products removed, effective use of space, is suitable for installing various convey equipment.

## ADVANCED CONTROLLER

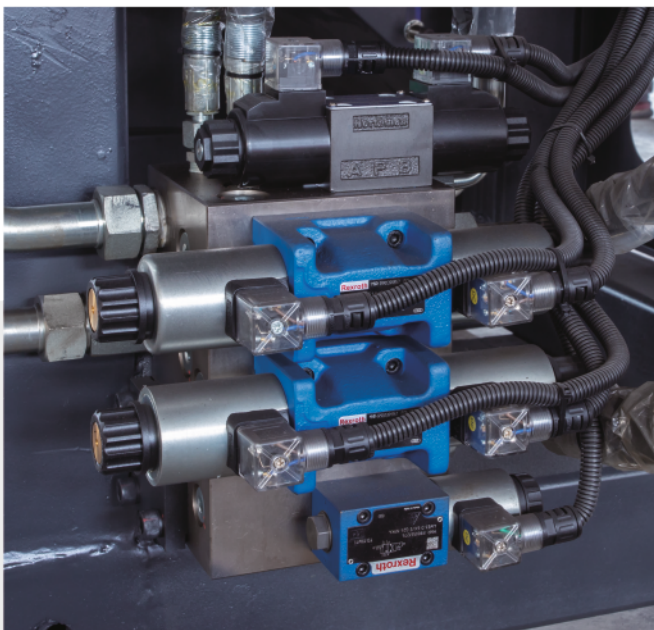
High-performance computers are used for the entire controller, big display, color display, full-featured.



## Hydraulic Unit

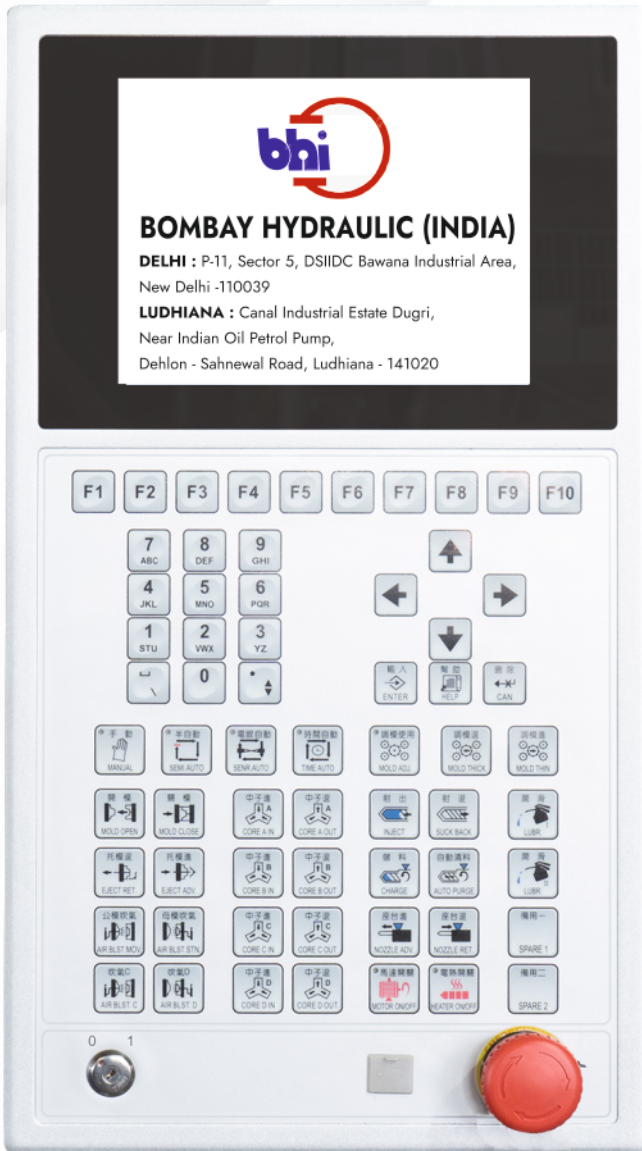


The hydraulic unit is composed of the world famous brand oil pump and control valve, and the pressure withstand performance is better, effectively ensure the accuracy, reliability, stability and durability of the machine, and has low noise and other environmental protection characteristics.

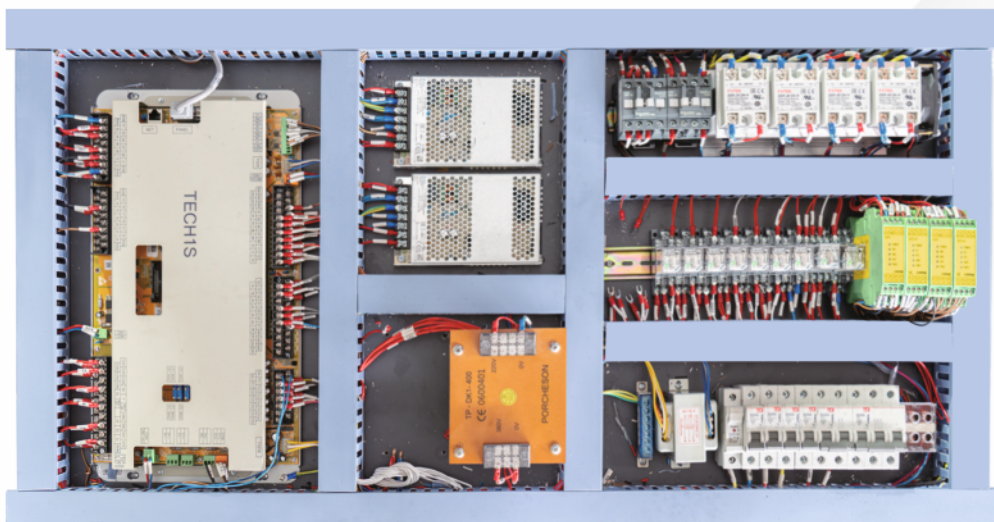


- Equipped with Taiwan Techmation latest servo system, and the host network port connection, response speed and accuracy greatly improved.
- All the oil circuit adopts the sleeve type connection, greatly reducing the chance of oil leakage.
- Proportional control of pressure, flow and back pressure.
- High performance international famous brand hydraulic original.
- All series are equipped with enhanced power system to improve injection speed, more suitable for high-speed, high precision molding needs.





- Equipped with Taiwan original "Techmation TECH-HYB" special controlsystem, greatly improve the response speed and precision of control.
- 12 " large display man-machine operation interface, easy to operate.
- The controller host adopts a dual-CPU structure to monitor the production progress in real time. It is simple to operate and powerful. Communication interfaces for auxiliary automation devices and factory network interfaces for Hongxing I-NET automation tube are reserved.
- Large capacity mold parameter storage, convenient management.
- Opening and closing mold, injection, ejection position control.
- Free switching of multiple languages.

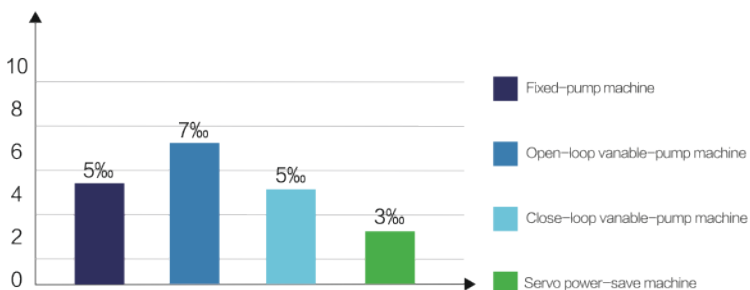




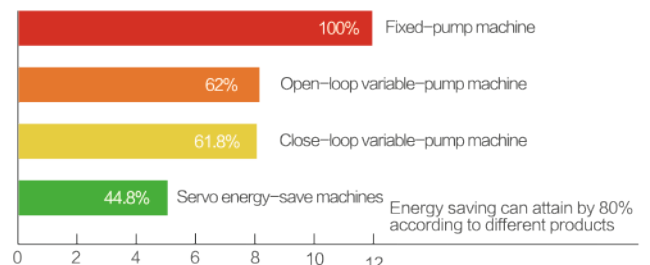
## ADVANTAGES OF SERVO ENERGY-SAVING INJECTION MOLDING MACHINE

- Servo control, completely eliminating high-pressure throttling, saving 50% -80% electricity compared to asynchronous motors and Fixed pumps, Power saving 30% -50% compared to asynchronous motor + variable pump.
- Quick response, 0-100% liter, speed of <0.1 sec, 0-100% pressure change The fastest up to 30ms, improve production efficiency.
- The precision of control is accurate, the error of repetition precision is 0.1%, and the product is precise.
- High overload capacity, servo torque overload is greater than or equal to 200%.
- State conversion is flexible: speed, torque control flexible switching, smooth.
- Reduce the temperature of hydraulic oil and reduce the amount of cooling water by more than 30%. Some occasions do not even need water cooling.
- Reduce the impact of open and lock mold, prolong hydraulic oil pump, mechanical and mold service life.
- Reduce noise and improve working environment.

Comparison of injection Precision



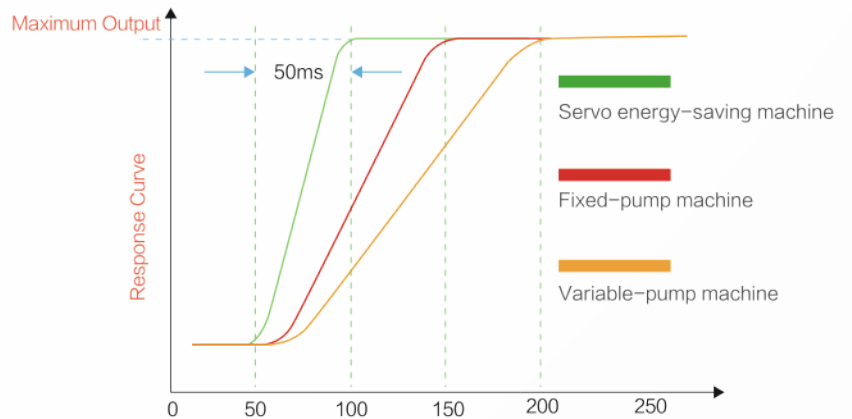
Power Consumption/h



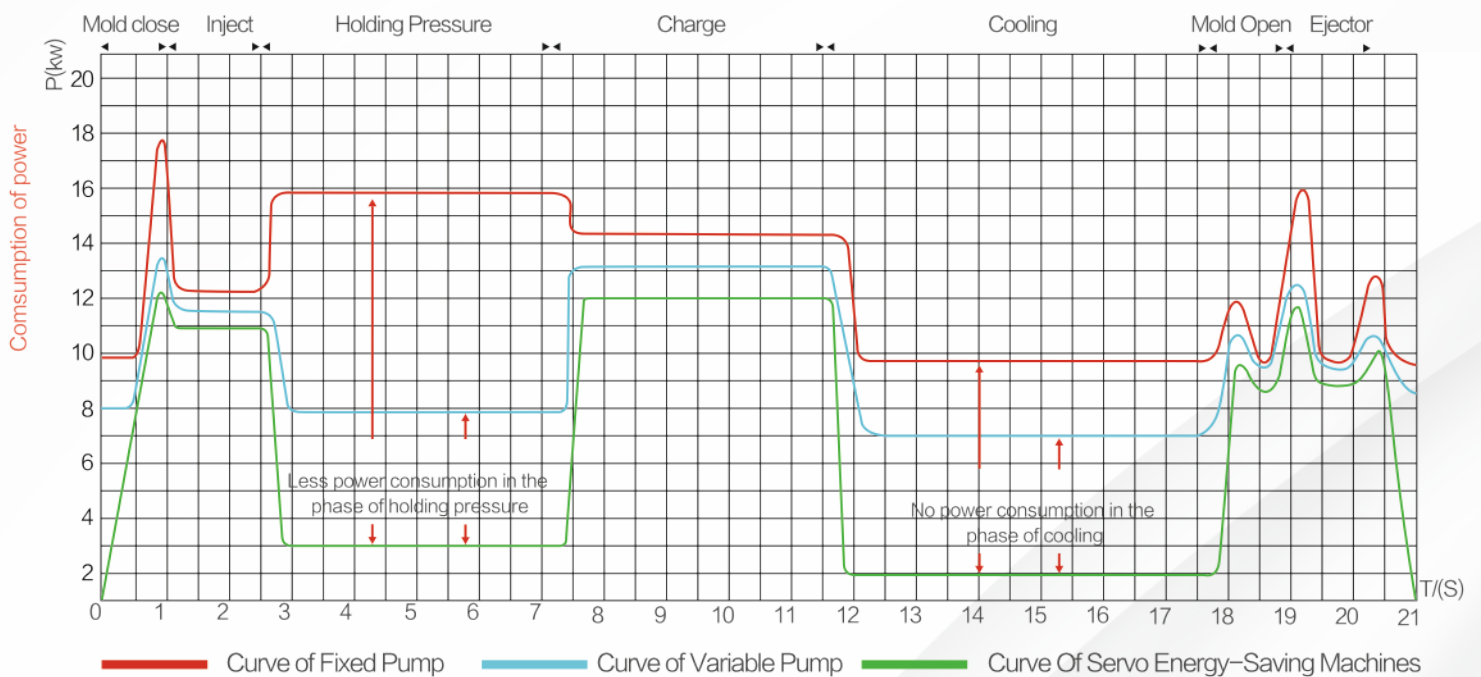


## Servo Motor Drive System

Due to the adoption of high response servo motor and internal gear pump power system, the maximum output of the injection machine is only 0.05s. Compared with the traditional hydraulic injection molding machine, the response speed of the injection molding machine is obviously faster, which effectively shortens the cycle and improves the production efficiency.



## Curve of Servo Energy Saving Machine

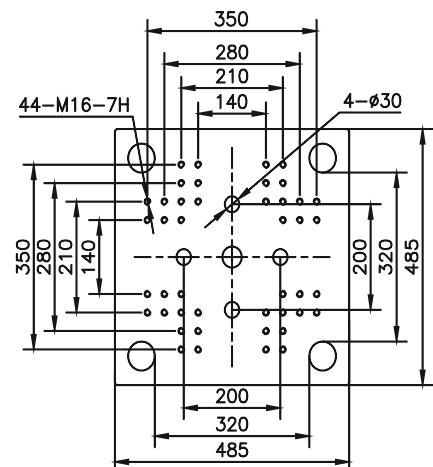
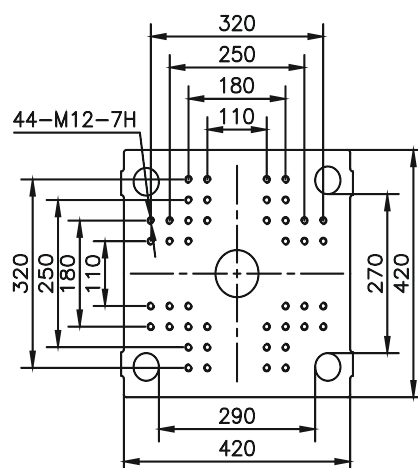


From the above picture, we can see that the output power is adjusted at any time with the load changing, avoiding the waste of energy. In the stage of holding pressure, the servo motor reduces the rotational speed and the energy consumption is very low. Especially in the cooling stage, the motor does not need to work, and the power consumption is 0. According to the different molding process, servo energy saving injection molding machine can save energy and power 20-80% compared with the traditional injection molding machine. According to the above data, when idle time occupies only 1/4 of the total cycle, the energy saving effect is very obvious. Let you really experience the benefits of electricity saving.

# Specifications

| DESCRIPTION            | UNIT            | BHI-40        |      |      | BHI-60      |     |     |
|------------------------|-----------------|---------------|------|------|-------------|-----|-----|
| INJECTION UNIT         |                 | A             | B    | C    | A           | B   | C   |
| Screw Diameter         | mm              | 28            | 30   | 32   | 25          | 30  | 35  |
| ScrewL/D Ratio         | L/D             | 20.1          | 18.8 | 17.6 | 24          | 21  | 19  |
| Shot Volume            | cm <sup>3</sup> | 62            | 70   | 80   | 64          | 92  | 125 |
| Injection Weight(PS)   | g               | 56            | 64   | 73   | 56          | 80  | 109 |
| Injection Rate         | g/sec           | 50            | 60   | 70   | 62          | 74  | 82  |
| Injection Pressure     | Mpa             | 179           | 156  | 137  | 275         | 191 | 140 |
| Screw Speed            | rpm             | 0-250         |      |      | 0-240       |     |     |
| CLAMPING UNIT          |                 |               |      |      |             |     |     |
| Clamping Force         | KN              | 400           |      |      | 600         |     |     |
| Toggle Stroke          | mm              | 255           |      |      | 280         |     |     |
| Space Between Tie Bars | mm              | 290*270       |      |      | 320*320     |     |     |
| Max.Mold Height        | mm              | 315           |      |      | 330         |     |     |
| Min.Mold Height        | mm              | 100           |      |      | 100         |     |     |
| Ejector Stroke         | mm              | 64            |      |      | 82          |     |     |
| Ejector Force          | KN              | 31            |      |      | 31          |     |     |
| Ejector Rods Number    | P               | 5             |      |      | 5           |     |     |
| OTHERS                 |                 |               |      |      |             |     |     |
| Max.Pump Pressure      | Mpa             | 16            |      |      | 16          |     |     |
| Pump Motor Power       | kW              | 11            |      |      | 11          |     |     |
| Heater Power           | kW              | 8             |      |      | 9.5         |     |     |
| Machine Dimension      | m               | 3.4*1.17*1.41 |      |      | 3.6*1.2*1.7 |     |     |
| Machine Weight         | T               | 2.1           |      |      | 2.5         |     |     |

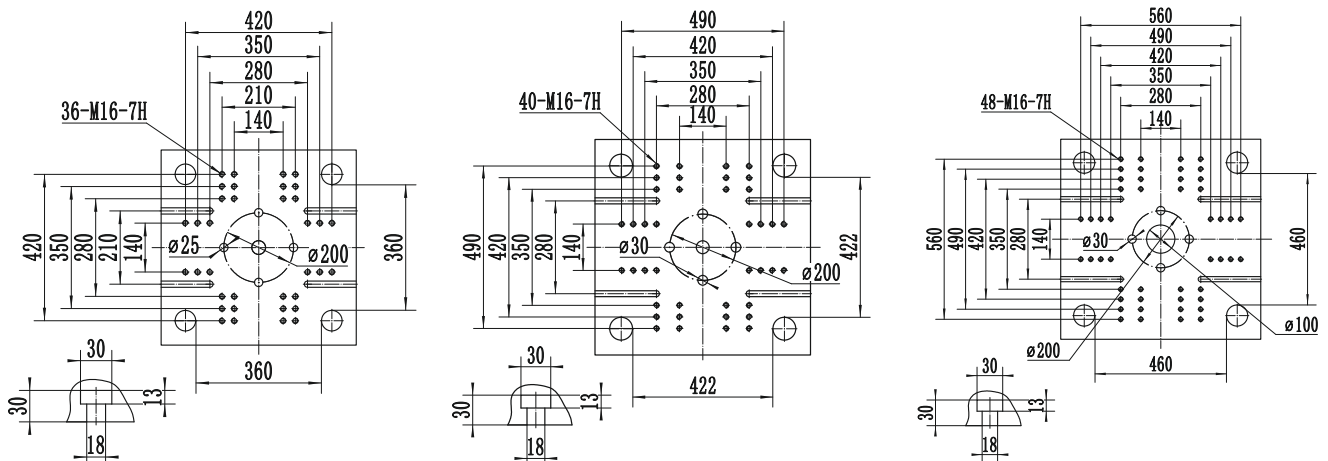
## LATEN DIMENSIONS





| DESCRIPTION            | UNIT | BHI-80/S     |      |     | BHI-130/S     |     |      | BHI-160/S     |     |     |
|------------------------|------|--------------|------|-----|---------------|-----|------|---------------|-----|-----|
| INJECTION UNIT         |      | A            | B    | C   | A             | B   | C    | A             | B   | C   |
| Screw Diameter         | mm   | 32           | 35   | 38  | 38            | 42  | 45   | 42            | 45  | 48  |
| ScrewL/D Ratio         | L/D  | 23           | 21.2 | 19  | 22.1          | 20  | 18.6 | 22            | 20  | 18  |
| Shot Volume            | cm³  | 144          | 170  | 200 | 195           | 235 | 270  | 305           | 320 | 380 |
| Injection Weight(PS)   | g    | 130          | 155  | 180 | 176           | 213 | 246  | 285           | 316 | 365 |
| Injection Rate         | g/s  | 81           | 110  | 143 | 91            | 111 | 127  | 106           | 131 | 166 |
| Injection Pressure     | Mpa  | 207          | 183  | 175 | 205           | 170 | 147  | 225           | 172 | 158 |
| Screw Speed            | rpm  | 0-220        |      |     | 0-190         |     |      | 0-180         |     |     |
| CLAMPING UNIT          |      |              |      |     |               |     |      |               |     |     |
| Clamping Force         | KN   | 800          |      |     | 1300          |     |      | 1600          |     |     |
| Toggle Stroke          | mm   | 320          |      |     | 390           |     |      | 440           |     |     |
| Space Between Tie Bars | mm   | 360*360      |      |     | 420*420       |     |      | 460*460       |     |     |
| Max.Mold Height        | mm   | 370          |      |     | 450           |     |      | 500           |     |     |
| Min.Mold Height        | mm   | 150          |      |     | 160           |     |      | 150           |     |     |
| Ejector Stroke         | mm   | 90           |      |     | 120           |     |      | 130           |     |     |
| Ejector Force          | KN   | 28           |      |     | 46            |     |      | 46            |     |     |
| Ejector Rods Number    | P    | 5            |      |     | 5             |     |      | 5             |     |     |
| OTHERS                 |      |              |      |     |               |     |      |               |     |     |
| Max.Pump Pressure      | Mpa  | 16           |      |     | 16            |     |      | 16            |     |     |
| Pump Motor Power       | kW   | 13           |      |     | 15            |     |      | 18.5          |     |     |
| Heater Power           | kW   | 6.3          |      |     | 8.7           |     |      | 10.8          |     |     |
| Machine Dimension      | m    | 4.1*1.15*1.7 |      |     | 4.6*1.28*1.92 |     |      | 4.8*1.32*2.05 |     |     |
| Machine Weight         | T    | 3            |      |     | 3.8           |     |      | 4.7           |     |     |

## PLATEN DIMENSIONS



| DESCRIPTION            | UNIT | BHI-170/S      |      |      | BHI-180/S   |      |      |
|------------------------|------|----------------|------|------|-------------|------|------|
| INJECTION UNIT         |      | A              | B    | C    | A           | B    | C    |
| Screw Diameter         | mm   | 42             | 45   | 48   | 45          | 50   | 55   |
| ScrewL/D Ratio         | L/D  | 22             | 19.5 | 17.5 | 22          | 19.8 | 17.2 |
| Shot Volume            | cm³  | 312            | 337  | 382  | 389         | 421  | 460  |
| Injection Weight(PS)   | g    | 275            | 326  | 365  | 354         | 408  | 430  |
| Injection Rate         | g/s  | 119            | 150  | 185  | 167         | 207  | 250  |
| Injection Pressure     | Mpa  | 176            | 142  | 113  | 185         | 171  | 141  |
| Screw Speed            | rpm  | 0-180          |      |      | 0-180       |      |      |
| CLAMPING UNIT          |      |                |      |      |             |      |      |
| Clamping Force         | KN   | 1700           |      |      | 1800        |      |      |
| Toggle Stroke          | mm   | 450            |      |      | 440         |      |      |
| Space Between Tie Bars | mm   | 470*470        |      |      | 480*480     |      |      |
| Max.Mold Height        | mm   | 540            |      |      | 600         |      |      |
| Min.Mold Height        | mm   | 170            |      |      | 160         |      |      |
| Ejector Stroke         | mm   | 130            |      |      | 132         |      |      |
| Ejector Force          | KN   | 46             |      |      | 50          |      |      |
| Ejector Rods Number    | P    | 5              |      |      | 5           |      |      |
| OTHERS                 |      |                |      |      |             |      |      |
| Max.Pump Pressure      | Mpa  | 16             |      |      | 16          |      |      |
| Pump Motor Power       | kW   | 18.5           |      |      | 22          |      |      |
| Heater Power           | kW   | 10.8           |      |      | 12.5        |      |      |
| Machine Dimension      | m    | 5.15*1.38*2.05 |      |      | 5.4*1.4*2.2 |      |      |
| Machine Weight         | T    | 5              |      |      | 5.6         |      |      |

| DESCRIPTION            | UNIT | BHI-350/S    |      |      | BHI-400/S    |      |      |
|------------------------|------|--------------|------|------|--------------|------|------|
| INJECTION UNIT         |      | A            | B    | C    | A            | B    | C    |
| Screw Diameter         | mm   | 60           | 65   | 70   | 70           | 75   | 80   |
| ScrewL/D Ratio         | L/D  | 23           | 22   | 20   | 23.6         | 22   | 20.6 |
| Shot Volume            | cm³  | 1000         | 1174 | 1362 | 1385         | 1598 | 1810 |
| njection Weight(PS)    | g    | 910          | 1068 | 1240 | 1275         | 1470 | 1665 |
| njection Rate          | g/s  | 258          | 302  | 350  | 339          | 392  | 450  |
| njection Pressure      | Mpa  | 214          | 182  | 157  | 199          | 173  | 152  |
| Screw Speed            | rpm  | 0-154        |      |      | 0-150        |      |      |
| CLAMPING UNIT          |      |              |      |      |              |      |      |
| Clamping Force         | KN   | 3500         |      |      | 4000         |      |      |
| Toggle Stroke          | mm   | 630          |      |      | 660          |      |      |
| Space Between Tie Bars | mm   | 680*680      |      |      | 730*730      |      |      |
| Max.Mold Height        | mm   | 710          |      |      | 750          |      |      |
| Min.Mold Height        | mm   | 250          |      |      | 280          |      |      |
| Ejector Stroke         | mm   | 160          |      |      | 160          |      |      |
| Ejector Force          | KN   | 89           |      |      | 100          |      |      |
| Ejector Rods Number    | P    | 13           |      |      | 13           |      |      |
| OTHERS                 |      |              |      |      |              |      |      |
| Max.Pump Pressure      | Mpa  | 16           |      |      | 16           |      |      |
| Pump Motor Power       | kW   | 37           |      |      | 45           |      |      |
| Heater Power           | kW   | 18.5         |      |      | 25           |      |      |
| Machine Dimension      | m    | 6.8*1.8*2.35 |      |      | 7.6*1.9*2.35 |      |      |
| Machine Weight         | T    | 12           |      |      | 14.5         |      |      |



| BHI-220/S |               |      | BHI-250/S |                |      | BHI-300/S |               |      |
|-----------|---------------|------|-----------|----------------|------|-----------|---------------|------|
| A         | B             | C    | A         | B              | C    | A         | B             | C    |
| 45        | 50            | 55   | 50        | 55             | 60   | 55        | 60            | 65   |
| 23.3      | 21            | 19.1 | 22        | 20             | 18.3 | 24        | 21            | 19.4 |
| 410       | 483           | 566  | 589       | 712            | 848  | 676       | 806           | 946  |
| 340       | 420           | 510  | 554       | 670            | 797  | 615       | 741           | 870  |
| 134       | 166           | 201  | 186       | 221            | 259  | 219       | 265           | 315  |
| 207       | 168           | 139  | 227       | 191            | 158  | 223.5     | 170           | 145  |
|           | 0-155         |      |           | 0-180          |      |           | 0-220         |      |
|           |               |      |           |                |      |           |               |      |
|           | 2200          |      |           | 2500           |      |           | 3000          |      |
|           | 490           |      |           | 560            |      |           | 590           |      |
|           | 530*530       |      |           | 580*580        |      |           | 630*630       |      |
|           | 560           |      |           | 630            |      |           | 670           |      |
|           | 190           |      |           | 220            |      |           | 250           |      |
|           | 145           |      |           | 162            |      |           | 160           |      |
|           | 70            |      |           | 70             |      |           | 70            |      |
|           | 5             |      |           | 9              |      |           | 13            |      |
|           |               |      |           |                |      |           |               |      |
|           | 16            |      |           | 16             |      |           | 16            |      |
|           | 22            |      |           | 30             |      |           | 30            |      |
|           | 14.9          |      |           | 17.4           |      |           | 17.8          |      |
|           | 5.9*1.42*2.25 |      |           | 6.42*1.48*2.28 |      |           | 6.55*1.7*2.3  |      |
|           | 6.6           |      |           | 8              |      |           | 9.5           |      |
| BHI-450/S |               |      | BHI-550/S |                |      | BHI-650/S |               |      |
| A         | B             | C    | A         | B              | C    | A         | B             | C    |
| 75        | 80            | 85   | 80        | 85             | 90   | 95        | 100           | 105  |
| 22.7      | 21            | 20   | 22        | 20             | 18.9 | 21        | 20            | 19   |
| 1900      | 2161          | 2440 | 2132      | 2440           | 2700 | 2834      | 3140          | 3412 |
| 1729      | 1967          | 2220 | 1962      | 2220           | 2487 | 2579      | 2857          | 3150 |
| 339       | 392           | 450  | 360       | 410            | 463  | 463       | 519           | 578  |
| 191       | 168           | 148  | 168       | 148            | 132  | 165       | 149           | 135  |
|           | 0-130         |      |           | 0-130          |      |           | 0-149         |      |
|           |               |      |           |                |      |           |               |      |
|           | 4500          |      |           | 5500           |      |           | 6500          |      |
|           | 750           |      |           | 850            |      |           | 900           |      |
|           | 760*760       |      |           | 870*820        |      |           | 925*875       |      |
|           | 820           |      |           | 850            |      |           | 900           |      |
|           | 220           |      |           | 350            |      |           | 330           |      |
|           | 200           |      |           | 265            |      |           | 335           |      |
|           | 110           |      |           | 152            |      |           | 150           |      |
|           | 13            |      |           | 13             |      |           | 13            |      |
|           |               |      |           |                |      |           |               |      |
|           | 16            |      |           | 16             |      |           | 16            |      |
|           | 55            |      |           | 60             |      |           | 45+22         |      |
|           | 31.3          |      |           | 33             |      |           | 42            |      |
|           | 7.8*1.95*2.2  |      |           | 8.5*2*2.4      |      |           | 10.2*2.2*2.71 |      |
|           | 15.5          |      |           | 20             |      |           | 29            |      |

Specifications

| DESCRIPTION            |                 | UNIT        | BHI-800/S |      |               | BHI-1000/S |      |   |
|------------------------|-----------------|-------------|-----------|------|---------------|------------|------|---|
| INJECTION UNIT         |                 |             | A         | B    | C             | A          | B    | C |
| Screw Diameter         | mm              | 95          | 105       | 110  | 100           | 105        | 110  |   |
| ScrewL/D Ratio         | L/D             | 21          | 20        | 18.5 | 21            | 20         | 18.5 |   |
| Shot Volume            | cm <sup>3</sup> | 3260        | 3982      | 4369 | 3930          | 4330       | 4753 |   |
| Injection Weight(PS)   | g               | 2966        | 3623      | 3977 | 3574          | 3941       | 4326 |   |
| Injection Rate         | g/sec           | 640         | 781       | 859  | 690           | 835        | 992  |   |
| Injection Pressure     | Mpa             | 174         | 143       | 130  | 155           | 140        | 128  |   |
| Screw Speed            | rpm             | 0-130       |           |      | 0-110         |            |      |   |
| CLAMPING UNIT          |                 |             |           |      |               |            |      |   |
| Clamping Force         | KN              | 8000        |           |      | 10000         |            |      |   |
| Toggle Stroke          | mm              | 1000        |           |      | 1100          |            |      |   |
| Space Between Tie Bars | mm              | 1020*960    |           |      | 1125*1085     |            |      |   |
| Max.Mold Height        | mm              | 960         |           |      | 1100          |            |      |   |
| Min.Mold Height        | mm              | 400         |           |      | 500           |            |      |   |
| Ejector Stroke         | mm              | 340         |           |      | 335           |            |      |   |
| Ejector Force          | KN              | 210         |           |      | 216           |            |      |   |
| Ejector Rods Number    | P               | 13          |           |      | 13            |            |      |   |
| OTHERS                 |                 |             |           |      |               |            |      |   |
| Max.Pump Pressure      | Mpa             | 16          |           |      | 16            |            |      |   |
| Pump Motor Power       | kW              | 55+22       |           |      | 55+37         |            |      |   |
| Heater Power           | kW              | 54          |           |      | 60            |            |      |   |
| Machine Dimension      | m               | 11*2.3*2.75 |           |      | 11.3*2.5*2.75 |            |      |   |
| Machine Weight         | T               | 36          |           |      | 46            |            |      |   |

| DESCRIPTION                 |                 | UNIT         | BHI-1100/S |      |              | BHI-1300/S |      |              | BHI-1600/S |       |   |
|-----------------------------|-----------------|--------------|------------|------|--------------|------------|------|--------------|------------|-------|---|
| INJECTION UNIT              |                 |              | A          | B    | C            | A          | B    | C            | A          | B     | C |
| Screw Diameter              | mm              | 100          | 110        | 120  | 110          | 120        | 130  | 130          | 140        | 150   |   |
| ScrewL/D Ratio              | L/D             | 24.2         | 22         | 20.2 | 24           | 22         | 20.3 | 22           | 20.4       | 19    |   |
| Shot Volume                 | cm <sup>3</sup> | 3970         | 4802       | 5716 | 5545         | 6600       | 7746 | 8369         | 9590       | 11009 |   |
| Injection Weight(PS)        | g               | 3886         | 4461       | 5566 | 5046         | 6006       | 7049 | 7524         | 8727       | 10018 |   |
| Injection Rate              | g/s             | 716          | 867        | 1031 | 604          | 742        | 870  | 1052         | 1225       | 1406  |   |
| Plasticizing Capacity       | g/s             | 88.3         | 100.8      | 120  | 82           | 106        | 135  | 139          | 151        | 165   |   |
| Injection Pressure          | Mpa             | 195          | 161        | 136  | 205          | 172        | 147  | 163          | 142        | 123   |   |
| Screw Speed                 | rpm             | 0-100        |            |      | 0-90         |            |      | 0-85         |            |       |   |
| CLAMPING UNIT               |                 |              |            |      |              |            |      |              |            |       |   |
| Clamping Force              | KN              | 11000        |            |      | 13000        |            |      | 16000        |            |       |   |
| Toggle Stroke               | mm              | 1100         |            |      | 1235         |            |      | 1600         |            |       |   |
| Space Between Tie Bars(W*H) | mm              | 1150*1110    |            |      | 1350*1250    |            |      | 1560*1480    |            |       |   |
| Max.Mold Height             | mm              | 1100         |            |      | 1250         |            |      | 1500         |            |       |   |
| Min.Mold Height             | mm              | 500          |            |      | 550          |            |      | 700          |            |       |   |
| Ejector Stroke              | mm              | 320          |            |      | 320          |            |      | 400          |            |       |   |
| Ejector Force               | KN              | 246          |            |      | 215          |            |      | 318          |            |       |   |
| Ejector Rods Number         | PC              | 21           |            |      | 21           |            |      | 29           |            |       |   |
| OTHERS                      |                 |              |            |      |              |            |      |              |            |       |   |
| Max.Pump Pressure           | Mpa             | 16           |            |      | 16           |            |      | 16           |            |       |   |
| Pump Motor Power            | kW              | 45+45        |            |      | 55+55        |            |      | 45+45+45     |            |       |   |
| Heater Power                | kW              | 68.45        |            |      | 74.35        |            |      | 95.05        |            |       |   |
| Machine Dimension           | m               | 11.5*2.8*4.0 |            |      | 12.6*2.9*4.0 |            |      | 14.6*3.5*4.2 |            |       |   |
| Machine Weight              | T               | 60           |            |      | 70           |            |      | 110          |            |       |   |
| Oil Tank Capacity           | L               | 1100         |            |      | 2000         |            |      | 2400         |            |       |   |



## Design Characteristics of Bottle Preform Machine BHI-PET Series

- The widely recognized enlarged four column spacing efficiently meets the industry characteristics of PET bottle preform molds with larger dimensions and smaller actual locking forces.
- Increase the power of the oil pump motor configuration, which accelerates the speed of conventional machines by 20%.
- The injection amount increases by 40% compared to conventional machines, making the melting cycle shorter.
- Increase the ejection force and ejection stroke by more than 30%, making it more suitable for multi cavity and deep cavity bottle preform forming.
- Adopting a servo proportional system, it saves 30%-60% energy and 30% water compared to traditional systems.
- The shooting platform adopts a bilinear guide rail structure, making the shooting action faster, more accurate, and more stable.
- High rigidity T-groove template structure, more convenient for mold replacement needs.

| DESCRIPTION            | UNIT            | BHI-170/PET    | BHI-220/PET  | BHI-250/PET   | BHI-300/PET   | BHI-350/PET  |
|------------------------|-----------------|----------------|--------------|---------------|---------------|--------------|
| <b>INJECTION UNIT</b>  |                 |                |              |               |               |              |
| Screw Diameter         | mm              | 50             | 60           | 65            | 70            | 80           |
| Shot Volume            | cm <sup>3</sup> | 436            | 717          | 963           | 1245          | 1640         |
| Injection Weight(PS)   | g               | 500            | 823          | 1104          | 1428          | 1881         |
| Injection Rate         | g/s             | 356            | 486          | 561           | 595           | 615          |
| Injection Pressure     | Mpa             | 118            | 103          | 112           | 115           | 116          |
| Screw Speed            | rpm             | 0-185          | 0-175        | 0-170         | 0-165         | 0-165        |
| <b>CLAMPING UNIT</b>   |                 |                |              |               |               |              |
| Clamping Force         | KN              | 1700           | 2200         | 2500          | 3000          | 3500         |
| Toggle Stroke          | mm              | 450            | 490          | 550           | 590           | 630          |
| Space Between Tie Bars | mm              | 470*470        | 530*530      | 580*580       | 630*630       | 680*680      |
| Max.Mold Height        | mm              | 500            | 550          | 600           | 670           | 700          |
| Min.Mold Height        | mm              | 180            | 200          | 220           | 250           | 250          |
| Ejector Stroke         | mm              | 130            | 145          | 150           | 160           | 160          |
| Ejector Force          | KN              | 46             | 70           | 90            | 70            | 89           |
| <b>OTHERS</b>          |                 |                |              |               |               |              |
| Max.Pump Pressure      | Mpa             | 16             | 16           | 16            | 16            | 16           |
| Pump Motor Power       | kW              | 22             | 30           | 37            | 37            | 45           |
| Heater Power           | kW              | 15.6           | 22.2         | 30.7          | 32.8          | 38.1         |
| Machine Dimension      | m               | 5.35*1.43*2.21 | 6.3*1.5*2.14 | 6.75*1.64*2.2 | 6.98*1.75*2.3 | 7.3*1.92*2.3 |
| Machine Weight         | T               | 5.5            | 7.5          | 8.5           | 10            | 12.5         |





## Auxiliary Equipment



Crusher



Hopper Dryer



Dehumidifier&Dryer



Chiller



Mold Temperature Controller



Mixer



Auto Loader 300G



Auto Loader 700G



Auto Loader 800G



Auto Loader 900G



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